

Implement a program on Exception Handling

1) Try-catch

```
class Main2
{
    public static void main(String args[])
    {
        try{
            int divideByZero = 8/0;
            System.out.println("Rest of code in try block");
        }

        catch (ArithmaticException e) {
            System.out.println("ArithmaticException => " +
e.getMessage());
        }
    }
}
```

A screenshot of a Windows desktop environment. At the top is a Command Prompt window titled 'cmd' with the path 'C:\Windows\System32\cmd.e'. The window contains the following text:

```
Microsoft Windows [Version 10.0.22621.2283]
(c) Microsoft Corporation. All rights reserved.

C:\Users\student\Desktop>javac trycatch.java

C:\Users\student\Desktop>java trycatch.java
error: class found on application class path: Main2

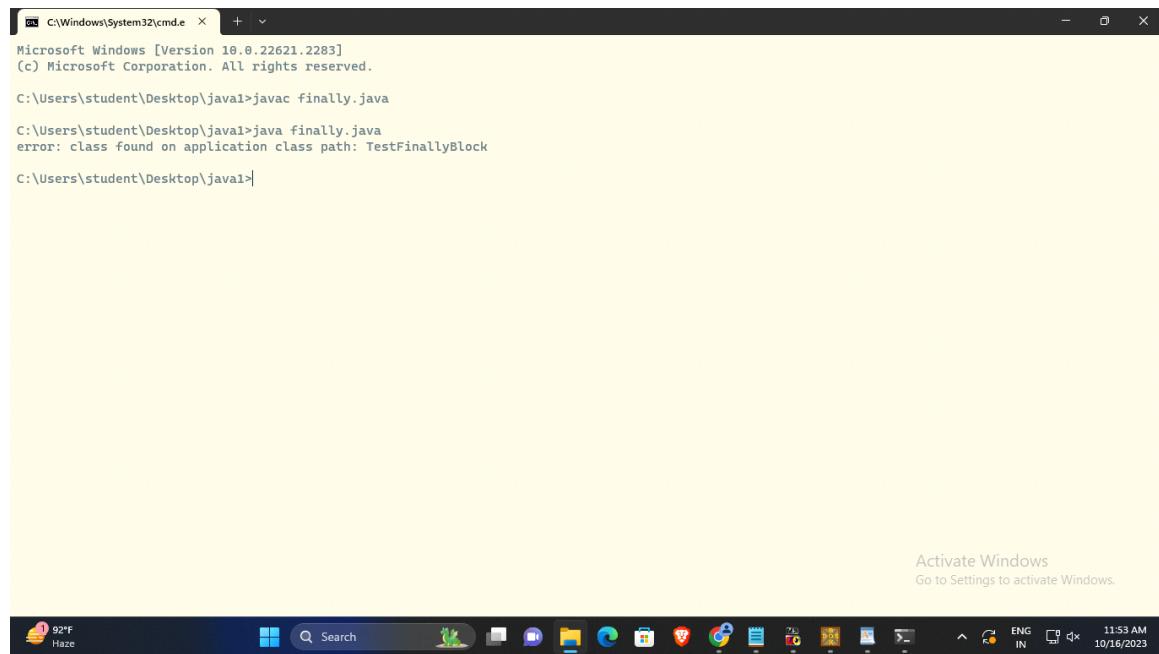
C:\Users\student\Desktop>java1>
```

The desktop background is yellow. In the bottom right corner, there is a watermark that says 'Activate Windows Go to Settings to activate Windows.' Below the desktop area is the Windows taskbar, which includes icons for various applications like File Explorer, Edge, and Google Chrome, as well as system status indicators for battery level (92%), language (ENG IN), and date/time (11:54 AM, 10/16/2023).

2)finally

```
class TestFinallyBlock {
    public static void main(String args[]){
        try{
            int data=25/5;
            System.out.println(data);
        }
        catch(NullPointerException e){
            System.out.println(e);
        }
        finally {
            System.out.println("finally block is always executed");
        }
    }
}
```

```
System.out.println("rest of phe code...");  
}  
}
```

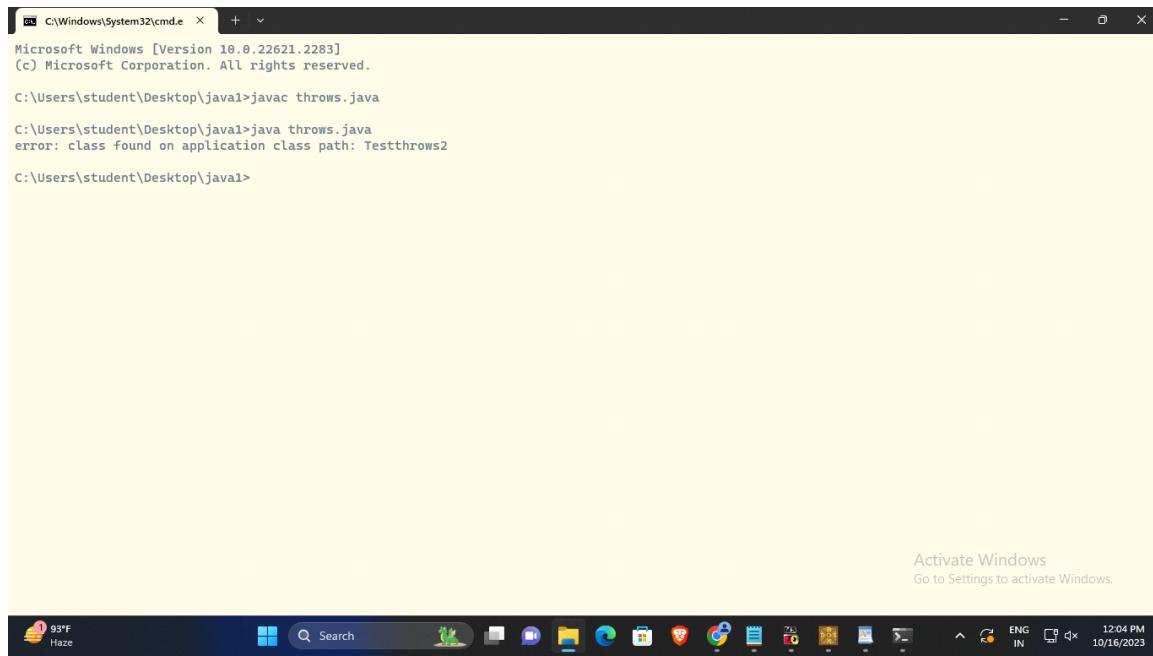


3) throws

```
class Testthrows2{  
    public static void main(String args[]){  
        try{  
            M m=new M();  
            m.method();  
        }
```

```
 }catch(Exception e){System.out.println("exception  
handled");}
```

```
 System.out.println("normal flow...");  
}  
}  
  
class M{  
    void method()throws IOException{  
        throw new IOException("device error");  
    }  
}
```



The screenshot shows a Windows Command Prompt window titled 'C:\Windows\System32\cmd.exe'. The window contains the following text:

```
C:\Windows\System32\cmd.exe + ~  
Microsoft Windows [Version 10.0.22621.2283]  
(c) Microsoft Corporation. All rights reserved.  
C:\Users\student\Desktop>javac throws.java  
C:\Users\student\Desktop>java throws.java  
error: class found on application class path: Testthrows2  
C:\Users\student\Desktop>java1>
```

The desktop background is yellow. At the bottom, there is a taskbar with various icons including the Start button, a search bar, and pinned apps like File Explorer, Edge, and Google Chrome. A system tray icon for battery status (93% F) and 'Haze' is visible. On the right side of the screen, there is a watermark for 'Activate Windows' with the text 'Go to Settings to activate Windows.' and a date '10/16/2023'.

4)throw

```
class TestThrow3
{
    public static void main(String args[])
    {
        try
        {
            throw new UserDefinedException("This is user-defined exception");
        }
        catch (UserDefinedException ude)
        {
            System.out.println("Caught the exception");
            System.out.println(ude.getMessage());
        }
    }
}

class UserDefinedException extends Exception
{
    public UserDefinedException(String str)
    {
        super(str);
    }
}
```

```
C:\Windows\System32\cmd.exe + ~ - x
Microsoft Windows [Version 10.0.22621.2283]
(c) Microsoft Corporation. All rights reserved.

C:\Users\student\Desktop>javac throw.java
C:\Users\student\Desktop>java throw.java
error: class found on application class path: TestThrow3

C:\Users\student\Desktop>java1>

Activate Windows
Go to Settings to activate Windows.

93°F Haze
```

